

Characterization Well R-7:

Location: TA-53, Los Alamos Canyon, east of Omega West reactor facility.

Survey coordinates (brass marker in NW corner of cement pad):
x: 1631666 E y: 1773653 N (NAD 83)
z: 6779.2 ft asl (NGVD 29)

Drilling: hollow stem auger and fluid-assist air rotary reverse circulation with casing advance
Phase 1 Start date: 02/22/00
Phase 1 End date: 02/25/00
Phase 2 Start date: 12/11/00
Phase 2 End date: 01/16/01

Borehole drilled to 1097 ft bgs (T.D.)

Data collection:

Hydrologic properties:

Field Hydraulic Testing: No tests were conducted.

Cores/cuttings submitted for geochemical and contaminant characterization: (0)

Groundwater samples submitted for geochem and contaminant characterization: (2)

Geologic properties:

Mineralogy, petrography, and chemistry (27)

Borehole logs:

Lithologic (0-1097 ft)

Video (LANL tool) 0-849 ft and 0-977 ft.

Natural gamma (LANL tool): 0-972 ft, and 0-977 ft. bgs.

Schlumberger Logs (0-290 ft cased, 290-1064 ft open hole): Litho density, Gamma Ray, Caliper, Combinable Magnetic Resonance, Formation Micro Imager, Spectral Gamma, Thermal/Epithermal Neutron, Array Induction, Natural Gamma.

Contaminants Detected in Borehole Samples:

Borehole screening data indicate no contaminants detected above background.

Well construction:

Drilling Completed: 01/16/01

Contract Geophysics: 01/12/01 through 01/13/01, and 01/14/01

Well Constructed: 01/20/01 through 01/31/01

Well Developed: 02/01/01 through 02/08/01

Westbay Installed: 02/21/01 through 02/26/01

Casing: 4.5-in I.D. stainless steel with external couplings

Number of Screens: 3

4.5-in I.D. pipe based, s.s. wire-wrapped; 0.010-in slotted.

Screen (perforated pipe interval):

Screen #1 - 363.2-379.2 ft bgs

Screen #2 - 730.4-746.4 ft bgs

Screen #3 - 895.5-937.4 ft bgs

Well development consisted of wire brushing, bailing, and pumping from Screen #3 and sump. Attempts to pump and bail water from Screens #1 and #2 were unsuccessful because of insufficient water from these zones.

